

CLAIMS

1. An in vivo imaging device comprising:
a first circuit board having disposed thereon an image sensor, said first
5 circuit board having a top surface and a bottom surface; and
a second circuit board, said second circuit board being in electrical
communication with the first circuit board and extending at an angle of between
about 0^0 to about 180^0 from the bottom surface of the first circuit board.
2. The device according to claim 1 wherein the second circuit board is
10 substantially perpendicular to the first circuit board.
3. The device according to claim 1 wherein the first circuit board has disposed
thereon least one illumination source.
4. The device according to claim 3 wherein the illumination source includes an
LED.
- 15 5. The device according to claim 1 wherein the second circuit board comprises
circuitry for processing image signals.
6. The device according to claim 1 wherein the second circuit board is configured
for accommodating an ASIC.
7. The device according to claim 1 wherein the second circuit board is configured
20 for accommodating a transmitter.
8. The device according to claim 1 wherein the second circuit board includes an
illumination source.
9. The device according to claim 8 wherein the illumination source includes an
LED.
- 25 10. The device according to claim 8 comprising a light redirecting device.
11. The device according to claim 10 wherein the light redirecting device is
selected from the group consisting of: a prism, a mirror and a fiber optic light
guide.

12. The device according to claim 1 wherein the second circuit board is configured for containing a power source.
13. In an in vivo imaging device, a circuit board configured for being in electrical communication with another circuit board and extending substantially
5 perpendicularly to the other circuit board.
14. The circuit board according to claim 13, comprising attaching means for attaching the circuit board substantially perpendicularly to the other circuit board.
15. The imaging device according to claim 14 wherein the attaching means
10 includes electrically communicating means.
16. The imaging device according to claim 13 comprising circuitry for processing image signals.
17. The imaging device according to claim 13 wherein the circuit device is configured for accommodating at least a transmitter.
- 15 18. The circuit device according to claim 13 wherein the circuit device is configured for accommodating at least an illumination source.
19. The circuit device according to claim 18 wherein the illumination source includes an LED.
20. In an in vivo imaging device, an image sensor, said sensor configured for
20 being in electrical communication with a circuit board, said circuit board extending substantially perpendicularly to the image sensor.
21. The image sensor according to claim 20 comprising a niche configured for accommodating a side edge of a second circuit board.
22. The image sensor according to claim 21 wherein the niche comprises
25 communication means for electrically communicating with the other circuit board.
23. In an in vivo imaging device, a circuit board configured for accommodating an image sensor and at least one illumination source.

24. The circuit board according to claim 23 wherein the illumination source includes an LED.
25. In an in vivo imaging device, a circuit board comprising a transmitter and a transmitter antenna, said antenna being embedded into the circuit board.
- 5 26. An in vivo imaging device comprising:
- a circuit board;
 - a transmitter; and
 - an antenna, said antenna substantially surrounding the circuit board.
27. The device of claim 26, comprising an imager.
- 10 28. The device of claim 26, wherein the antenna substantially surrounds the transmitter.
29. An in vivo imaging device comprising:
- an imager;
 - a power source; and
 - 15 an antenna, said antenna disposed substantially between the power source and the imager.
30. The device of claim 29, wherein the power source includes a battery.
31. A capsule comprising:
- an optical window behind which are disposed:
 - 20 an illumination source;
 - a first circuit board configured for accommodating at least an image sensor, said first circuit board having a bottom surface; and
 - a second circuit board, said second circuit board being in electrical communication with the first circuit board and extending substantially
 - 25 perpendicularly from the bottom surface of the first circuit board.
32. The capsule according to claim 25 comprising a transmitter.
33. The device according to claim 8 wherein the illumination source includes an LED.